Open Ended Question

What is the difference between the terms "absolute" and "relative"

Please enter your answer here.

Relative Dating

There are two ways of doing relative dating:

1) Fossils

A fossil is the remains or evidence of a living thing

Examples: bones, shell prints, burrows, tracks, pollen

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Fossils

Index fossils can provide the relative age of a rock layer

Why?

1) existed only during specific spans of time (ESRT 8 & 9)
2) occurred in large geographic areas

Index fossils include fusulinids and trilobites.

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How do fossils form?

Permineralization occurs when minerals carried by water are deposited around a hard structure.

Specific environmental conditions are necessary in order for fossils to form.

Only a tiny percentage of living things became fossils

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Preserved remains form when an entire organism becomes encased in material such as ice.

A natural cast forms when flowing water removes all of the original tissue, leaving an impression.

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Amber-preserved fossils are organisms that become trapped in tree resin that hardens after the tree is buried.

As water dissolves away plant matter, minerals in the water replace the plant matter. A stone copy is left behind.

Example : petrified trees

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If you don't have a fo hat else can you do?

Collaborate Board

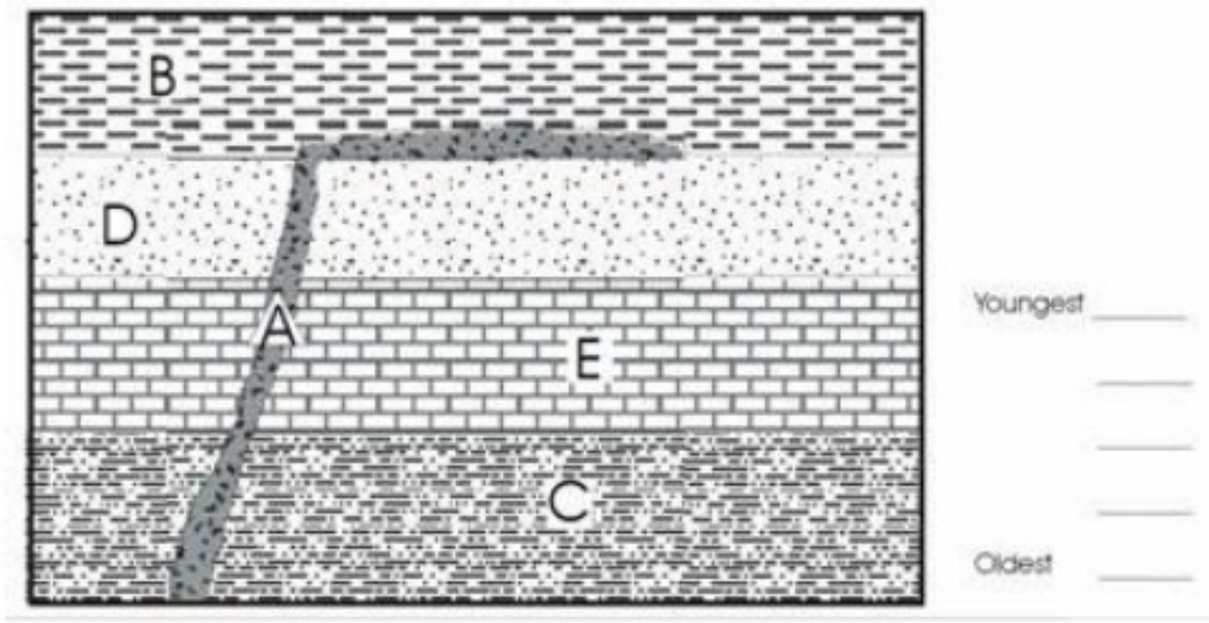
If you don't have a fossil, what else can you do?

Relative Dating

2) Rock Correlation Laws

There are 5 laws that help geologists to determine the relative age of a layer of rock.

The Law of Superposition states that in a series of sedimentary rock layers, younger rocks normally lie on top of older rocks.



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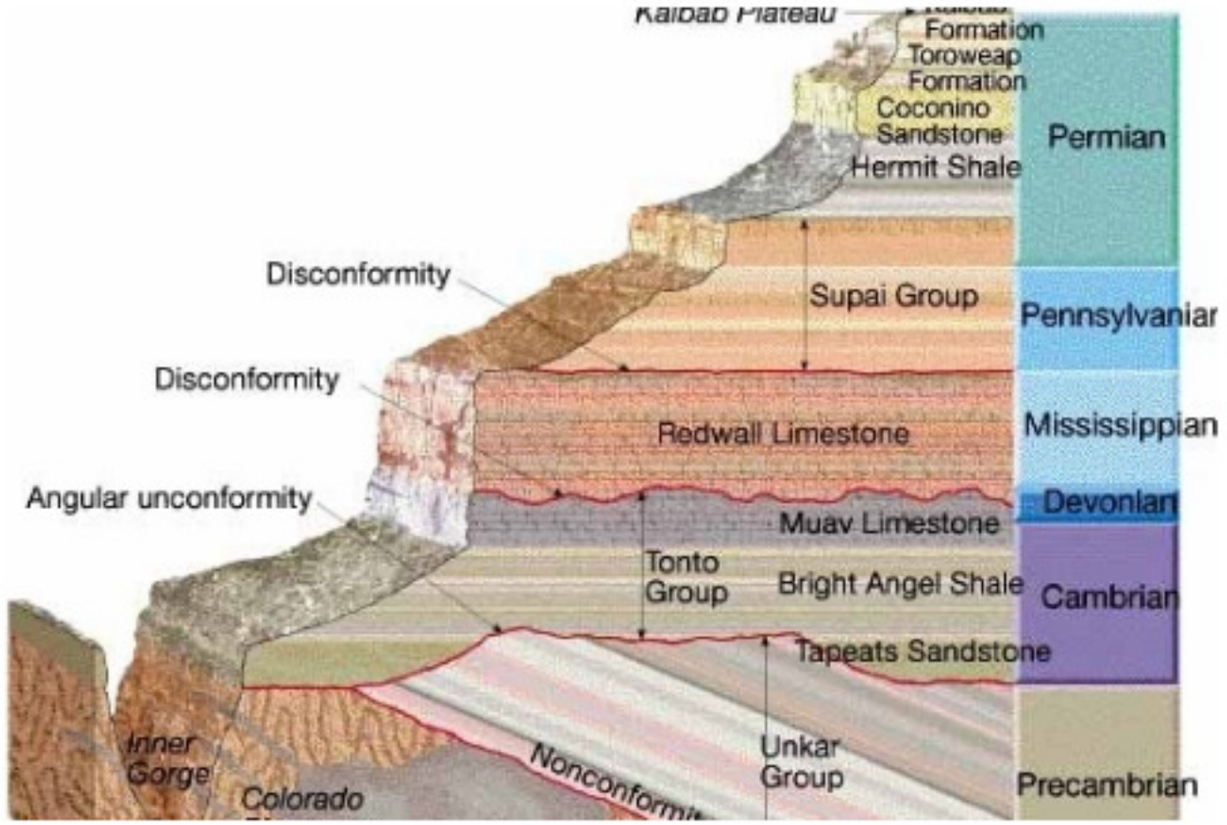
Law of Original Horizontality: All sedimentary rocks are deposited flat initially. If you find them at an angle,they have been moved.



Law of Uniformitarianism: The way things occurred in the past are likely the same way things occur today.

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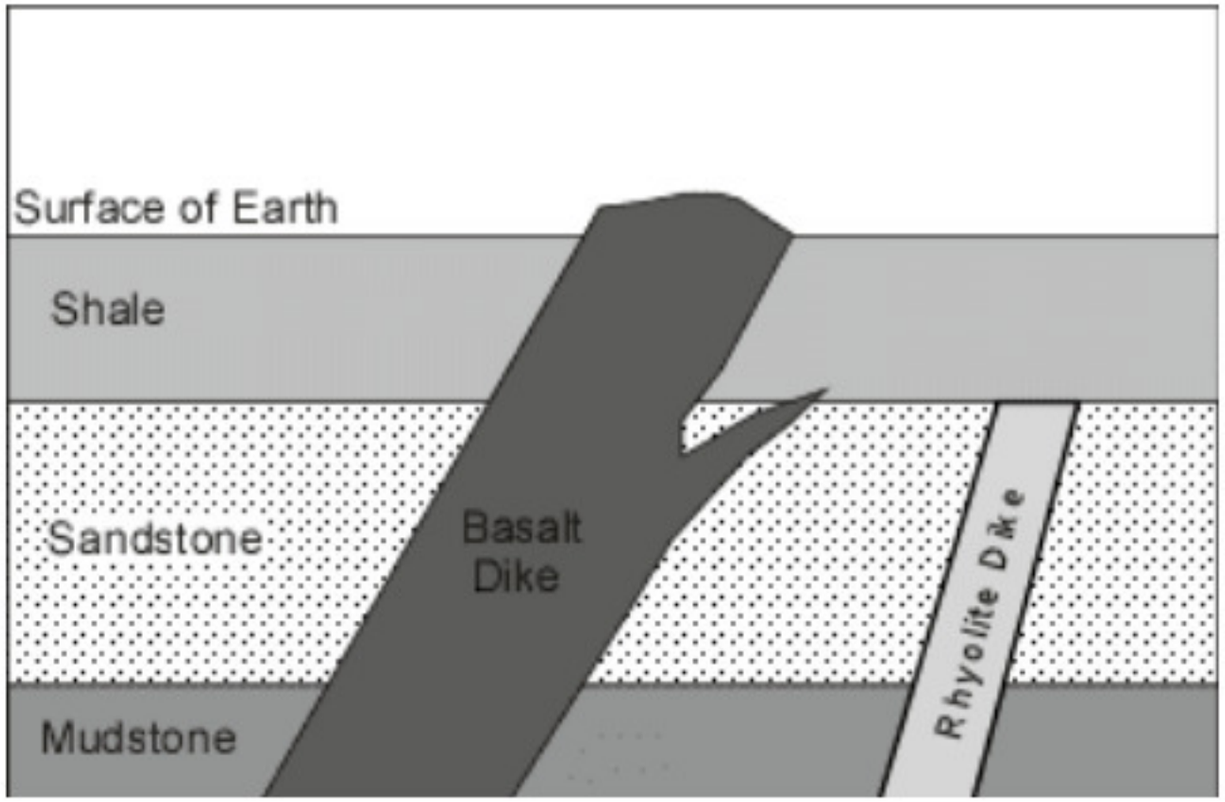
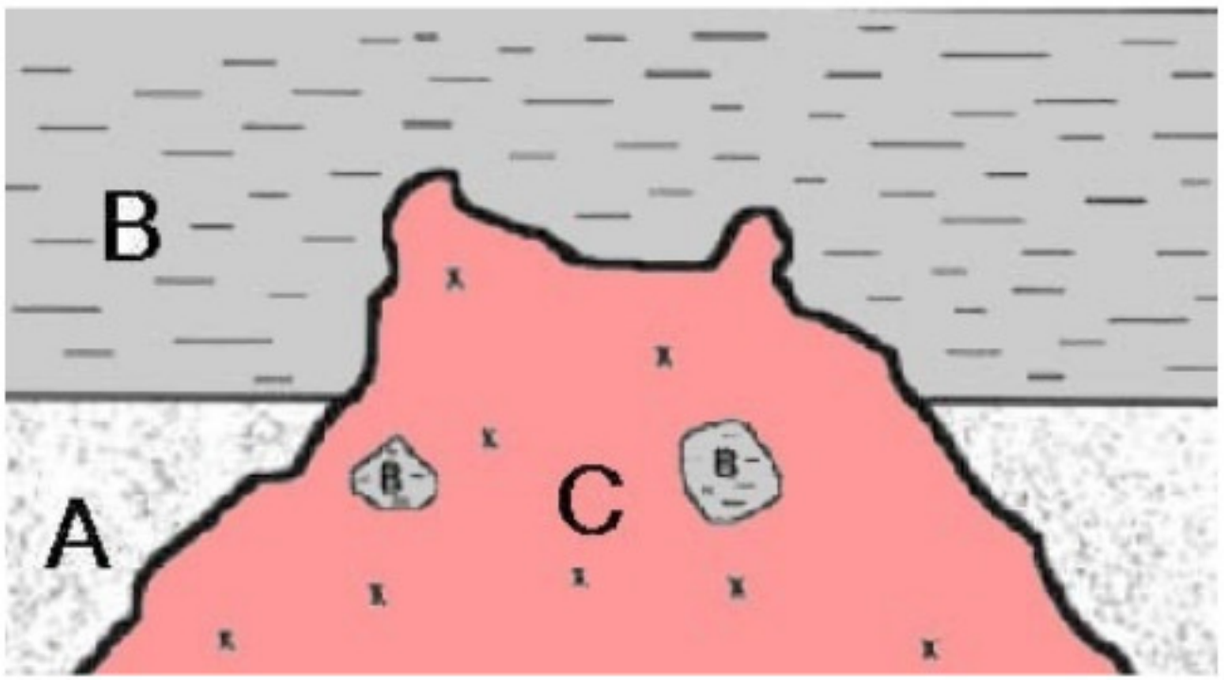
Law of Cross-cutting relationships: igneous rocks or faults that "cut" into other rocks are the youngest.(the "other rocks" had to be there before they could get cut by anything)



Law of Inclusions
When a rock contains inclusions of other rock material, the inclusion rock must be older.
It had to have existed before in order to be inclused in a new rock formation.



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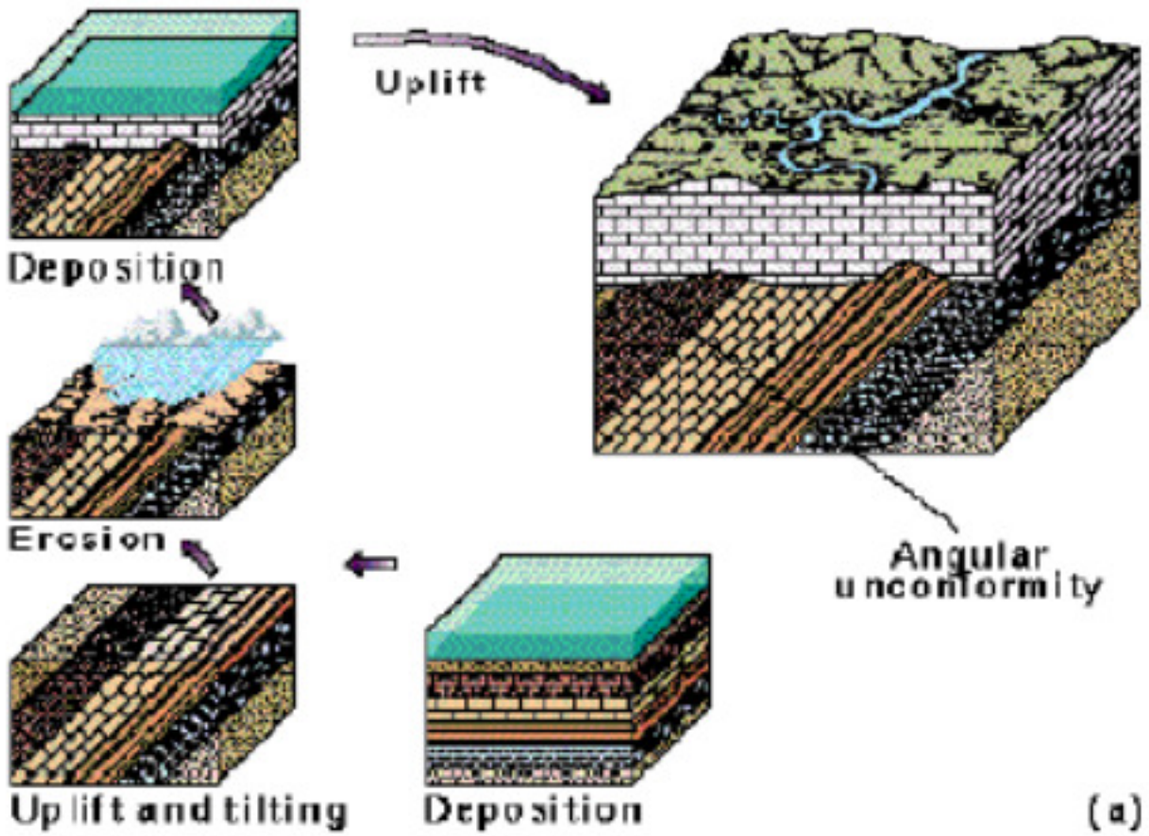
Unconformity or Disconformity?

Unconformities are gaps in the geologic record that may indicate episodes of crustal deformation, erosion, and sea level variations.

Disconformity is a folding or intrusion of rock.



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Match the rock correlation law to its description.

Law of Inclusions

past are likely the same way things occur

material, the inclusion rock must be older

normally lie on top of older rocks

Law of

Law of Original

igneous rocks or

Matching Pairs